

PATENTS

Attorney Docket Number MPI94-008CP2DV2CN5M

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	J. Adams <i>et al.</i>	Art Unit:	<i>To be assigned</i>
Serial No.:	<i>To be assigned</i>	Examiner:	<i>To be assigned</i>
Filing Date:	Herewith		
Title:	<b>Boronic Ester and Acid Compounds, Synthesis and Uses</b>		

**Mail Stop Patent Application**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**REMARKS**

Dear Commissioner for Patents:

Enclosed herewith is an application entitled "Boronic Ester and Acid Compounds, Synthesis and Uses." Pursuant to 37 C.F.R. § 1.53(b), this application is being filed as a continuation of co-pending application No. 10/392,165, filed on March 19, 2003, now allowed, which is a continuation of application No. 10/125,997, filed on April 19, 2002, now Pat. No. 6,617,317, which is a continuation of application No. 10/100,295, filed on March 18, 2002, , now Pat. No. 6,548,668, which is a continuation of application No. 09/953,540, filed on September 14, 2001, now Pat. No. 6,465,433, which is a continuation of application No. 09/490,511, filed on Jan. 25, 2000, now Pat. No. 6,297,217, which is a division of application No. 09/085,404, filed on May 26, 1998, now Pat. No. 6,066,730, which is a division of

application No. 08/549,318, filed on Oct. 27, 1995, now Pat. No. 5,780,454, which is a continuation-in-part of application No. 08/442,581, filed on May 16, 1995, now Pat. No. 6,083,903, which is a continuation-in-part of application No. 08/330,525, filed on Oct. 28, 1994, now abandoned.

The specification filed herewith differs from the parent application in containing a new first page with updated cross-reference data and a new claim set. As discussed below, newly presented claims 1-24 find written description support in the originally filed specification.

Claims 1-13 are directed to a compound of formula (1a), wherein A is zero. As described in the paragraph spanning pages 17 and 18, when A is zero, the compound of formula (1a) is a dipeptide. In the claimed compounds,  $X^2$  is  $-C(O)-NH-$ . Thus, the claimed compounds have a standard peptide bond at the position  $X^2$ . Support for these selections for  $A^1$  and  $X^2$  can be found throughout the specification and in the exemplified compounds.

Claim 1 is directed to a compound of formula (1a), wherein  $R^2$  is  $-CH_2-R^5$ , where  $R^5$  is one of aryl, cycloalkyl, or a 5-10 membered saturated, partially unsaturated or aromatic heterocycle, any of which groups is optionally substituted. Claim 8 is directed to the embodiment wherein  $R^5$  is an optionally substituted  $C_{6-10}$  aryl. Support for the selection of  $-CH_2-R^5$  for  $R^2$  is found at page 18, line 23, and at page 18, lines 23-24, the preference of  $C_{6-10}$  aryl for  $R^5$  is described.

Claim 12 is directed to a compound of formula (1a), wherein P is  $R^7-C(O)-$  or  $R^7-SO_2-$  and  $R^7$  is an optionally substituted aryl or aralkyl, R is hydrogen,  $R^2$  is benzyl, and  $R^3$  is  $C_4$  alkyl. Similar selections also appear, independently and in combination, in various other claims. Support for the selections for P is found at page 16, lines 27-29. support for the selection of hydrogen for the group R is found at page 19, line 13. Support for the selection of benzyl for  $R^2$  finds support

at page 18, line 27. Support for the selection of C<sub>4</sub> alkyl for R<sup>3</sup> is found at page 19, line 2. Support for each of the remaining genus and subgenus selections can also be found in the specification, in the exemplified compounds, and in the previously presented and entered claims.

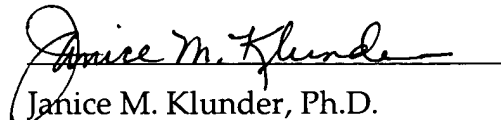
Claims 14-24 are directed to a composition, which upon combination with a physiologically acceptable saline carrier forms a solution suitable for intravenous, intramuscular or subcutaneous administration to a patient. The solution comprises a boronic acid compound of the recited formula, or a pharmaceutically acceptable salt thereof. The compound recitations in claims 14-26 parallel those in claims 1-13. As discussed above, support for the various genus and subgenus compound recitations are found throughout the specification and in the originally filed claims. Support for the recitation of intravenous, intramuscular, or subcutaneous administration is found at page 32, lines 11-13. Support for the recitation of a combination with a physiologically acceptable carrier, including physiological saline, can be found at page 32, lines 15-17.

In summary, therefore, no new matter has been added by way of the amendments made to the specification, and claims 1-24 find written description support in the originally filed specification.

No fees other than those provided for in the accompanying papers are believed to be due in connection with this application. However, please charge any payments due or credit any overpayments associated with this matter to our Deposit Account No. 501668.

Pursuant to 37 C.F.R. § 1.136(a)(3), the Examiner is authorized to charge any fee under 37 C.F.R. § 1.17 applicable in the instant, as well as in future communications, to Deposit Account No. 08-0219. Such an authorization should be treated as a constructive petition for extension of time in the concurrent as well as future communications in the above-identified application.

Respectfully submitted,

  
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